



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D206-642-151
Job Sheet 192883



Part No: D206-642-151

Job Qty: 1 pcs

Part Name: Replacement Skidtube, Low Gear with Run-on Landing Fits LH or RH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 4/3/19

Job Tracking No:

Due Date: 4/19/19

Created By: Marie Lajeunesse

Type: SOLD *sth*

Description:

Note: DWG D3804 REV A(DEO), IIN-D206-642 REV Q SHEETS 13,26 IPP REV:A 10.12.08 PER IIN REV.N DD
VERF:EC IPP REV:B 11.09.16 PER IIN REV.O DD VERF:EC IPP Rev:C 12.11.22 now swage per ecn12-679
DD verf:JLM IPP Rev:D 14.04.24 ECN14-520 DD verf:JLM IPP Rev:E 16.04.04 as per CHG004(ecn16-553)
DD verf:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Skidtubes - 1	1 pcs	4/19/19		0.00	1.82	Skidtubes - 1		<i>DD</i>
							Skidtubes - 2		
							Skidtubes - 3		<i>DE</i>
							Skidtubes - 4		
							Skidtubes - 5		
							Skidtubes - 6		
							Skidtubes - 7		
120	QC 5	1 pcs	4/19/19		0.00	0.00	QC 5 - 10		<i>DAS</i> APR 12 2019 68 9-89
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
130	QC 9	1 pcs	4/19/19		0.00	0.00	QC 5 - 30		<i>EL</i>
							QC 5 - 40		
							QC 9 - 10		
							QC 9 - 18		
							QC 9 - 24		
							QC 9 - 43		
							QC 9 - 50		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S170814



Part: D206-642-151

Job No: 192883

Serial No/Batch: S170814

Revision:

Inspector:

Exp Date:

Instructions: FAA STC SA00475SE 18/10/17, TC STC SH38-4 Issue 2, EASA STC

Plex 4/3/19 11:03 AM Dart.lajeune

				QC 9 - 9	
140 Handfinish - 1-1 Chemical-B4B	1 pcs	4/19/19	0.00 0.33	Handfinish - 1 - 1 - B4B	
				Handfinish - 1 - 2 - B4B	
				Handfinish - 1 - 3 - B4B	
				Handfinish - 1 - 4 - B4B	
				Handfinish - 1 - 5 - B4B	
				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	DR19/04/15
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 - B4B	
				Handfinish - 1 - 16 - B4B	
				Handfinish - 1 - 17 - B4B	
				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
150 QC 7	1 pcs	4/19/19	0.00 0.00	QC 7 - 10	
				QC 7 - 13	
				QC 7 - 14	
				QC 7 - 15	
				QC 7 - 17	
				QC 7 - 18	
				QC 7 - 19	
				QC 7 - 2	
				QC 7 - 28	
				QC 7 - 3	
				QC 7 - 30	
				QC 7 - 34	
				QC 7 - 36	
				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	
				QC 7 - 59	
				QC 7 - 60	MG
				QC 7 - 9	
				QC 7 - 68	
				QC 7 - 50	
				QC 7 - 67	

				QC 7 - 40	
160 Skidtubes - 2 - B4B	1 pcs	4/19/19	0.00 2.00	Skidtubes - 1 - B4B	
				Skidtubes - 2 - B4B	
				Skidtubes - 3 - B4B	
				Skidtubes - 4 - B4B	TF
				Skidtubes - 5 - B4B	
				Skidtubes - 6 - B4B	
				Skidtubes - 7 - B4B	
180 Skidtubes - 3 - B4B	1 pcs	4/19/19	0.00 1.82	Skidtubes - 1 - B4B	
				Skidtubes - 2 - B4B	
				Skidtubes - 3 - B4B	
				Skidtubes - 4 - B4B	TF
				Skidtubes - 5 - B4B	
				Skidtubes - 6 - B4B	
				Skidtubes - 7 - B4B	
190 QC 5	1 pcs	4/19/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	BE
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
200 Skidtubes - 4 - B4B	1 pcs	4/19/19	0.00 2.84	Skidtubes - 1 - B4B	DD
				Skidtubes - 2 - B4B	
				Skidtubes - 3 - B4B	
				Skidtubes - 4 - B4B	
				Skidtubes - 5 - B4B	BE
				Skidtubes - 6 - B4B	
				Skidtubes - 7 - B4B	
215 QC 9	1 pcs	4/19/19	0.00 0.00	QC 9 - 10	
				QC 9 - 18	
				QC 9 - 24	DAS 24 9-89
				QC 9 - 43	
				QC 9 - 50	
				QC 9 - 9	
230 QC 5	1 pcs	4/19/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	

APR 24 2019

DAS
APR 26 2019
68
9-89

					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
240	Handfinish - 4-1-Assembly-B4B	1 pcs	4/19/19	0.00 0.78	Handfinish - 4 - 1 - B4B	
					Handfinish - 4 - 10 - B4B	D.R 19/04/29
					Handfinish - 4 - 11 - B4B	
					Handfinish - 4 - 12 - B4B	
					Handfinish - 4 - 13 - B4B	
					Handfinish - 4 - 14 - B4B	
					Handfinish - 4 - 15 - B4B	
					Handfinish - 4 - 2 - B4B	
					Handfinish - 4 - 3 - B4B	
					Handfinish - 4 - 4 - B4B	
					Handfinish - 4 - 5 - B4B	
					Handfinish - 4 - 6 - B4B	
					Handfinish - 4 - 7 - B4B	
					Handfinish - 4 - 8 - B4B	
					Handfinish - 4 - 9 - B4B	
250	Powdercoat - 1 White Gl(A)-B4B	1 pcs	4/19/19	0.00 0.25	Powdercoat - 1 - B4B	
					Powdercoat - 2 - B4B	
					Powdercoat - 3 - B4B	
					Powdercoat - 4 - B4B	
	START: 1:55 OUT: 3:00 FINISH: 2:25					
260	QC 3	1 pcs	4/19/19	0.00 0.00	QC 3 - 10	
					QC 3 - 13	
					QC 3 - 15	ML 19-4-29
					QC 3 - 17	
					QC 3 - 18	
					QC 3 - 2	
					QC 3 - 28	
					QC 3 - 3	
					QC 3 - 30	
					QC 3 - 34	
					QC 3 - 36	
					QC 3 - 41	
					QC 3 - 51	
					QC 3 - 58	
					QC 3 - 59	
					QC 3 - 68	
					QC 3 - 9	
					QC 3 - 40	
					QC 3 - 19	
270	Handfinish - 4-2-Assembly-B4B	1 pcs	4/19/19	0.00 1.00	Handfinish - 4 - 1 - B4B	ML 19-4-30
					Handfinish - 4 - 10 - B4B	
					Handfinish - 4 - 11 - B4B	
					Handfinish - 4 - 12 - B4B	
					Handfinish - 4 - 13 - B4B	
					Handfinish - 4 - 14 - B4B	
					Handfinish - 4 - 15 - B4B	
					Handfinish - 4 - 2 - B4B	

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DAS
15
9-89

					Handfinish - 4 - 3 - B4B	
					Handfinish - 4 - 4 - B4B	
					Handfinish - 4 - 5 - B4B	
					Handfinish - 4 - 6 - B4B	
					Handfinish - 4 - 7 - B4B	
					Handfinish - 4 - 8 - B4B	
					Handfinish - 4 - 9 - B4B	
					Handfinish - 3 - 1 - B4B	14-4-30
280 Handfinish - 3-1- WingWalk-B4B	1 pcs	4/19/19	0.00 0.60		Handfinish - 3 - 2 - B4B	
					Handfinish - 3 - 3 - B4B	
					Handfinish - 3 - 4 - B4B	
					Handfinish - 3 - 5 - B4B	
					QC 3 - 10	
					QC 3 - 13	
					QC 3 - 15	
					QC 3 - 17	
290 QC 3	1 pcs	4/19/19	0.00 0.00		QC 3 - 18	
					QC 3 - 2	
					QC 3 - 28	
					QC 3 - 3	
					QC 3 - 30	
					QC 3 - 34	
					QC 3 - 36	
					QC 3 - 41	
300 QC 5	1 pcs	4/19/19	0.00 0.00		QC 3 - 51	
					QC 3 - 58	
					QC 3 - 59	
					QC 3 - 68	APR 30 2019 68 9-89
					QC 3 - 9	
					QC 3 - 40	
					QC 3 - 19	
					QC 5 - 10	
310 Packaging 3-1 - Stock - B4B	1 pcs	4/19/19	0.00 0.00		QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	APR 30 2019 68 9-89
					QC 5 - 9	
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
					Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	

				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	DAG
				Packaging 3 - 35 - B4B	21 APR 30 2019
				Packaging 3 - 36 - B4B	9-85
315 DC - 1 - B4B	1	4/19/19	0.00 0.00	DC - 1 - B4B	DAG
	pcs			DC - 2 - B4B	21 APR 30 2019
320 QC 21 - FG	1	4/19/19	0.00 0.00	QC 21 - FG - 21	9-85
	pcs			QC 21 - FG - 70	21 APR 30 2019

Part Op 110 - Skid tubes - 1-Deburr Fwd edge of tube 2- Remove ridge on inside of Fwd edge of tube as per Dwg D3804 3-Weld
 Descriptions: Fwd Cap as per Dwg D3804. Use aluminum rod. Grind D2647 to fit as required. AIR 138989

120 - QC5- Inspect part completeness to step on W/O

130 - QC9- Inspect visual per QSI004- Fusion Welds

140 - Chemical Conversion Coat per QSI005 4.1

150 - QC7-Inspect Chemical Conversion Coat

160 - Skid tubes --1-Open holes of detail B to finished size as per Dwg DEO D3804, (without cutting fluid) 2-C'sink one crossbolt spacer hole as per Dwg D3804 DEO Detail B(without cutting fluid) 3-Deburr and blow out all chips from inside the tube

180 - Skid tubes - 1-Locate, install and rivet doublers as per Dwg D3804. Micro-shave rivets as required 2-Bond D2654-1 web in place as per QSI 015. Ensure holes line up.Allow 12 Hrs. cure time before cutting

190 - QC5- Inspect part completeness to step on W/O

200 - 1-Remove alodine in one area see DEO Detail B from around hole and prepare for welding 2-Prep per QSI 005 and Insert one D2649 crossbolt spacer. Weld as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod. AIR 138989

215 - QC9- Inspect visual per QSI004- Fusion Welds

230 - QC5- Inspect part completeness to step on W/O

240 - Pressure Wash per QSI005 4.3/ Clean and remove all markings) HandFinish4 Assemble as per dwg

250 - White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Make sure Nut Plate Thread is protected using paint screw, and mask GHW studs. START TIME: _____

260 - QC3- Inspect Part Finish

270 - HandFinish4 (Assemble as per dwg - - 1-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D3804. Clean excess adhesive. 2- Install D2680-041 Nut Plate as per Dwg D2650

280 - Wing Walk as per dwg QSI005 4.4 Batch _____ 1-Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive

290 - QC3- Inspect Part Finish

300 - QC5- Inspect part completeness to step on W/O

310 - Identify and pack for shipping as per PPP D206-642-151 Location :FG107

315 - Document Control - Photocopy bluefile & type labels per PPP D206-642-151 CHG004

320 - QC21- Final Inspection - Work Order Release

Sikaflex
5163437
exp: 12/09/19



Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2620	Skidtube, 206 Skidtube	1 pcs (1 ea)	110-Skidtubes - 1	5165744
D2647	Cap	1 pcs (1 ea)	110-Skidtubes - 1	5166098
CCR264SS3-3	Cherry Rivet	2 Ea (2 ea)	180-Skidtubes - 3 - B4B	F11137622
CR3212-4-03	Cherry Rivet	2 Ea (2 ea)	180-Skidtubes - 3 - B4B	F11137886
CR3212-4-04	Cherry Rivet	52 Ea (52 ea)	180-Skidtubes - 3 - B4B	5171694
D2654-1	Web	1 pcs (1 ea)	180-Skidtubes - 3 - B4B	5054750
D3286-1	Doubler	2 pcs (2 ea)	180-Skidtubes - 3 - B4B	5049486
D2649	Cross Bolt Spacer	1 pcs (1 ea)	200-Skidtubes - 4 - B4B	5156881
D3286-3	Spacer	2 pcs (2 ea)	200-Skidtubes - 4 - B4B	5140137
D4720-1	Spacer	18 pcs (18 ea)	200-Skidtubes - 4 - B4B	5154579
D2651-1	Plug	6 pcs (6 ea)	270-Handfinish - 4-2-Assembly-B4B	5041163
D2651-3	O-Ring	6 pcs (6 ea)	270-Handfinish - 4-2-Assembly-B4B	5044502
D2680-041	Nut Plate	1 pcs (1 ea)	270-Handfinish - 4-2-Assembly-B4B	F164243
AN3-37A	Bolt	7 Ea (7 ea)	280-Handfinish - 3-1- WingWalk-B4B	5135486
D2646	Aft Cap	1 pcs (1 ea)	280-Handfinish - 3-1- WingWalk-B4B	5160603
D3805-041	Run-on Landing Wearplate Fwd	1 pcs (1 ea)	280-Handfinish - 3-1- WingWalk-B4B	5145266
D3805-045	Run-on Landing Wearplate Aft	1 pcs (1 ea)	280-Handfinish - 3-1- WingWalk-B4B	5143359
D3873-1	Bushing	14 pcs (14 ea)	280-Handfinish - 3-1- WingWalk-B4B	5172677
MS21042L3	Nut	7 Ea (7 ea)	280-Handfinish - 3-1- WingWalk-B4B	5157462
MS27039-1-08	Screw	2 Ea (2 ea)	280-Handfinish - 3-1- WingWalk-B4B	5133202
MS27039-4-06	Screw	1 Ea (1 ea)	280-Handfinish - 3-1- WingWalk-B4B	x 5166474
NAS1149D0332J	Washer	2 Ea (2 ea)	280-Handfinish - 3-1- WingWalk-B4B	5123446
NAS1149D0363J	Washer	7 Ea (7 ea)	280-Handfinish - 3-1- WingWalk-B4B	5162888
NAS1149D0463J	Washer	1 Ea (1 ea)	280-Handfinish - 3-1- WingWalk-B4B	5055952

Job Allocations

009528

009530

Operation	Component Part	Required	Inventory	Allocated
110-Skidtubes - 1	D2620	1	9	0
	D2647	1	48	0
180-Skidtubes - 3 - B4B	CCR264SS3-3	2	243	0
	CR3212-4-03	2	120	0
	CR3212-4-04	52	641	0
	D2654-1	1	7	0
200-Skidtubes - 4 - B4B	D3286-1	2	10	0
	D2649	1	76	0
	D3286-3	2	16	0
	D4720-1	18	242	0
270-Handfinish - 4-2-Assembly-B4B	D2651-1	6	243	0
	D2651-3	6	382	0
	D2680-041	1	23	0
280-Handfinish - 3-1- WingWalk-B4B	AN3-37A	7	91	0
	D2646	1	58	0
	D3805-041	1	5	0
	D3805-045	1	6	0
	D3873-1	14	26	0
	MS21042L3	7	3,790	0
	MS27039-1-08	2	751	0
	MS27039-4-06	1	113	0
	NAS1149D0332J	2	3,634	0
	NAS1149D0363J	7	1,614	0
	NAS1149D0463J	1	5,667	0

Part Specifications

Specifications could not be found.

Plex 4/3/19 11:03 AM Dart.lajeunesse.marie

ITEM	Qty -041	Qty -043	Part Number	Description
1	X		D3804-041	SKIDTUBE ASSEMBLY, 206 A/B LOW
2		X	D3804-043	SKIDTUBE ASSEMBLY, 206 A/B HIGH
5	1	1	D2600-1-160	EXTRUSION
6	1	1	D2646	AFT CAP
7	1	1	D2647	CAP
8	19	20	D2649	CROSS BOLT SPACER
9	6	8	D2651-1	PLUG
10	6	8	D2651-3	O-RING
11		1	D2654-3	WEB
12	1		D2654-1	WEB
13	1	1	D2680-041	NUT PLATE
14	2	2	D3286-1	DOUBLER
15	2	2	D3286-3	STUD
21	2	2	AN960JD10L	WASHER
22	1	1	AN960JD416	WASHER
23	2	2	CCR264SS3-3	RIVET
24	2	2	CR3212-4-03	RIVET
25	52	52	CR3212-4-04	RIVET
26	2	2	MS27039-1-08	SCREW
27	1	1	MS27039-4-06	SCREW

NOTES

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: 12.5 lb
- 9) WELD PER DART QSI 004
- 10) BENDING: DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 11) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 12) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 192883 M15
1904-05

DEO ATTACHED

RELEASED
UP 09.03.07
per ECN 09-536

A	NEW ISSUE	MB	08.07.07
REV.	DESCRIPTION	BY	DATE
DESIGN	93		
DRAWN	93		
CHECKED	93		
MFG. APPR.	93		
APPROVED	93		
DE APPR.	93		
DATE	08.07.07		

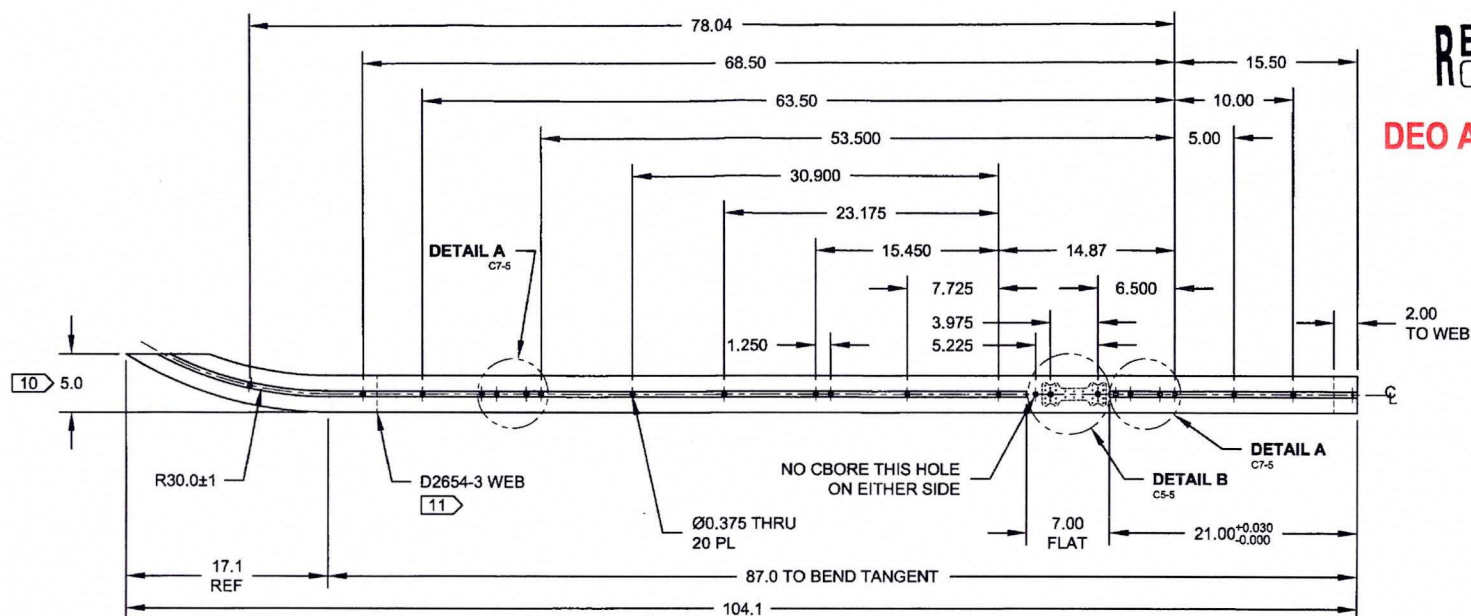
DART AEROSPACE USA, INC	
PORT HADLOCK, WA	
DRAWING NO.	REV. A
D3804	SHEET 1 OF 5
TITLE	SCALE
SKIDTUBE ASSEMBLY, 206A/B	NTS

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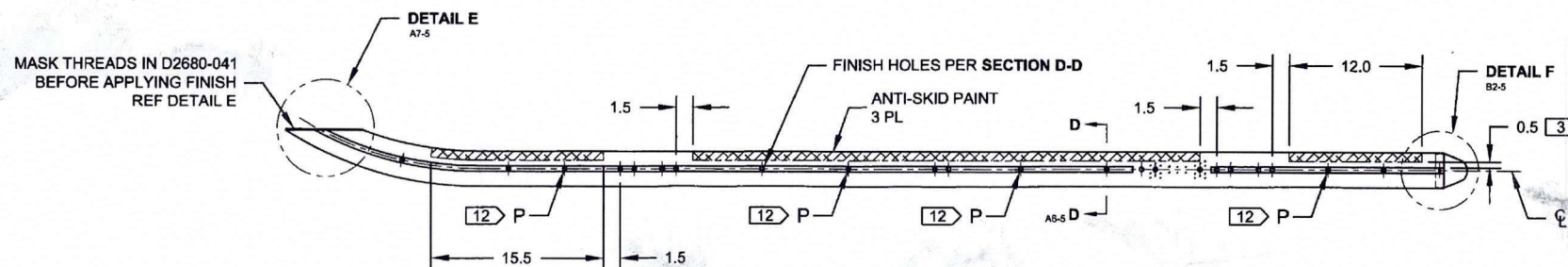


RELEASED
(09.02.03)

DEO ATTACHED



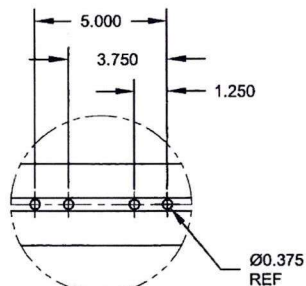
D3804-043 BENDING/DRILLING DETAIL



D3804-043 ASSEMBLY/FINISHING DETAIL

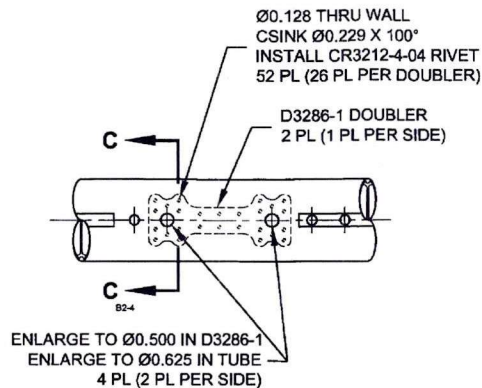
DESIGN	99	DART AEROSPACE USA, INC	
DRAWN	99	PORT HADLOCK, WA	
CHECKED	99	DRAWING NO.	REV. A
MFG. APPR.	99	D3804	SHEET 3 OF 5
APPROVED	99	TITLE	SCALE
DE APPR.	99	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC	
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8 7 6 5 4 3 2 1



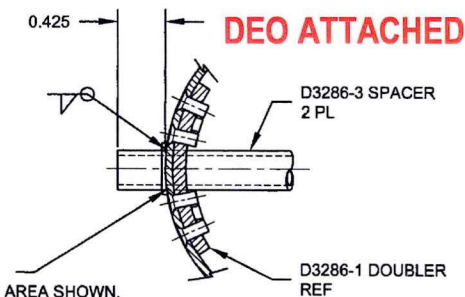
DETAIL A
SCALE NONE

D6-2
C2-2
D6-3
C2-3



DETAIL B
SCALE NONE

C3-2
C3-3



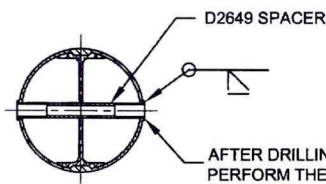
RELEASED
CP 09.03.03

DEO ATTACHED

- TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH OUTSIDE SURFACE OF ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO Ø0.500
 4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.03 X 45°
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE AND GRIND FLUSH

SECTION C-C
PARTIAL SECTION
SCALE NONE

C6-4



SECTION D-D
FOR Ø0.375 HOLES ONLY
SCALE NONE

A4-2
A4-3

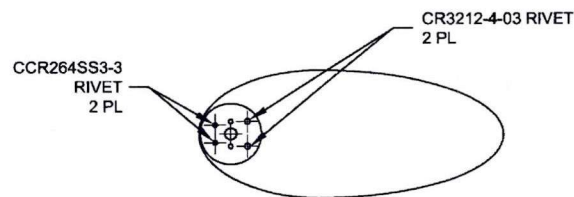
- AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:
1. CHAMFER HOLE 0.03 X 45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. CBORE TO Ø0.313 X 0.75 DP (EXCEPT WHERE INDICATED)

DESIGN	97	DART AEROSPACE USA, INC	
DRAWN	1	PORT HADLOCK, WA	
CHECKED	97	DRAWING NO.	REV. A
MFG. APPR.	97	D3804	SHEET 4 OF 5
APPROVED	97	TITLE	SCALE
DE APPR.	97	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

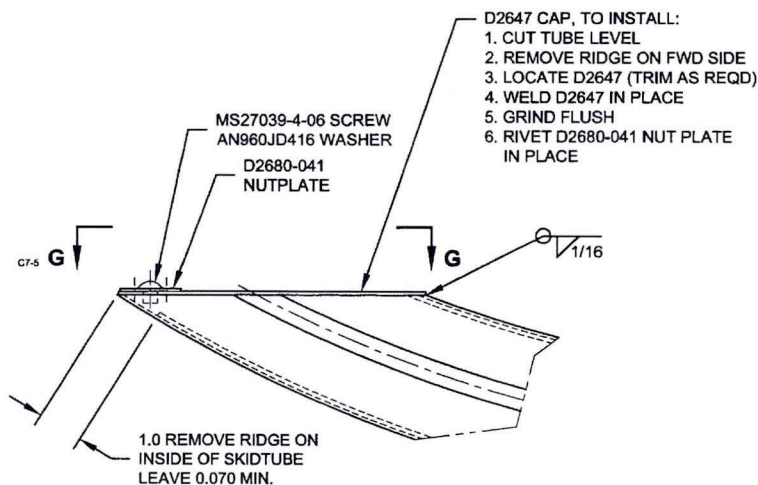
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RELEASED
09.03.03

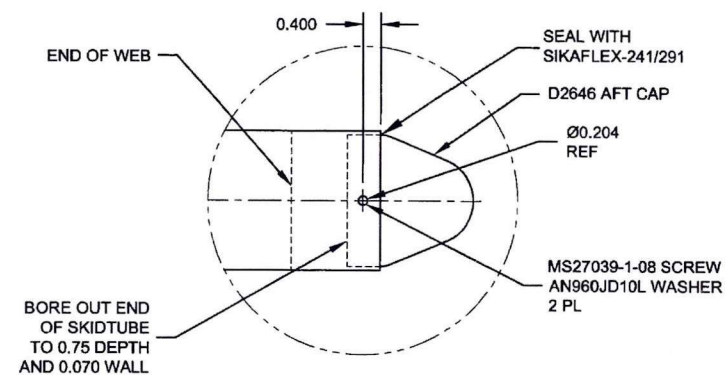
DEO ATTACHED



VIEW G-G
SCALE NONE A7-5



DETAIL E
SCALE NONE B7-2
B7-3



DETAIL F
SCALE NONE B2-2
B2-3

DESIGN	91	DART AEROSPACE USA, INC	
DRAWN	J	PORT HADLOCK, WA	
CHECKED	91	DRAWING NO.	REV. A
MFG. APPR.	E	D3804	SHEET 5 OF 5
APPROVED	91	TITLE	SCALE
DE APPR.	J	SKIDTUBE ASSEMBLY, 206A/B	NTS
DATE	08.07.07	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

DRAWING NO. D3804	TITLE SKIDTUBE ASSEMBLIES, 206A/B	REV. A	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3804-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>CP</i>	CHECKED <i>A.P.</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DE APPR. <i>[Signature]</i>			
DATE 12.10.12	DATE 12.10.22	DATE 12.10.22	DATE 12.10.22	DATE 12.10.22			

PURPOSE:

CHANGE C'BORED WELDED CROSSBOLT SPACERS TO SWAGED SPACERS

CHANGE:

PARTS LIST IS AMENDED AS FOLLOWS:

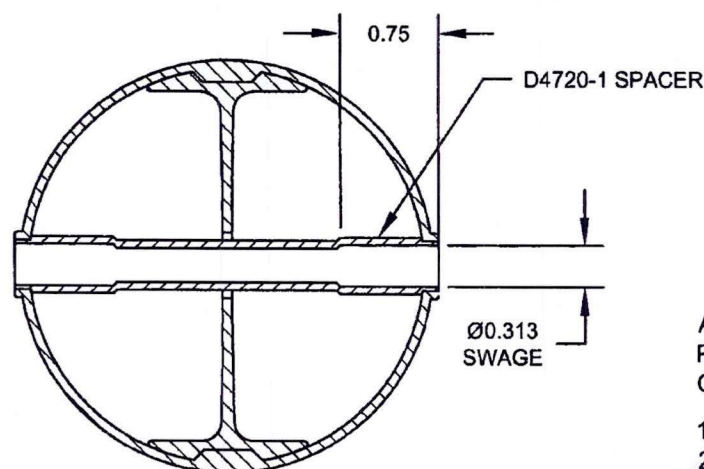
IS:

QTY -041	QTY -043	PART NUMBER	DESCRIPTION
1	1	D2649	CROSS BOLT SPACER
18	19	D4720-1	SPACER

WAS:

19	20	D2649	CROSS BOLT SPACER
----	----	-------	-------------------

ADD SECTION H-H BELOW, WHICH IS THE SAME SECTION VIEW AS SECTION D-D OF DWG.
C'BORED HOLES ARE **NOW SWAGED** PER SECTION H-H BELOW. FOR THE Ø0.375 HOLE THAT IS NOT C'BORED, WELD PER SECTION D-D OF DWG (SEE AMENDED DETAIL B FOR REFERENCE).

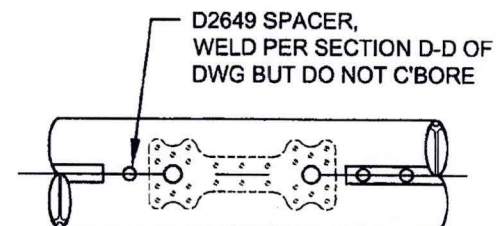


SECTION H-H

FOR Ø0.375 HOLES ONLY

FOR HOLES THAT ARE CURRENTLY C'BORED ONLY

NOT TO SCALE



DETAIL B

AMENDMENT TO DETAIL B
NOT TO SCALE

RELEASE
2012-11-16

AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375 HOLES THAT ARE
CURRENTLY C'BORED:

1. INSERT D4720-1 SPACER, 18 PL (-041) OR 19 PL (-043)
2. SWAGE TO Ø0.313 X 0.75 DP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

Work Order ID 164122

Thursday, July 13, 2017 12:33:14 PM

164122

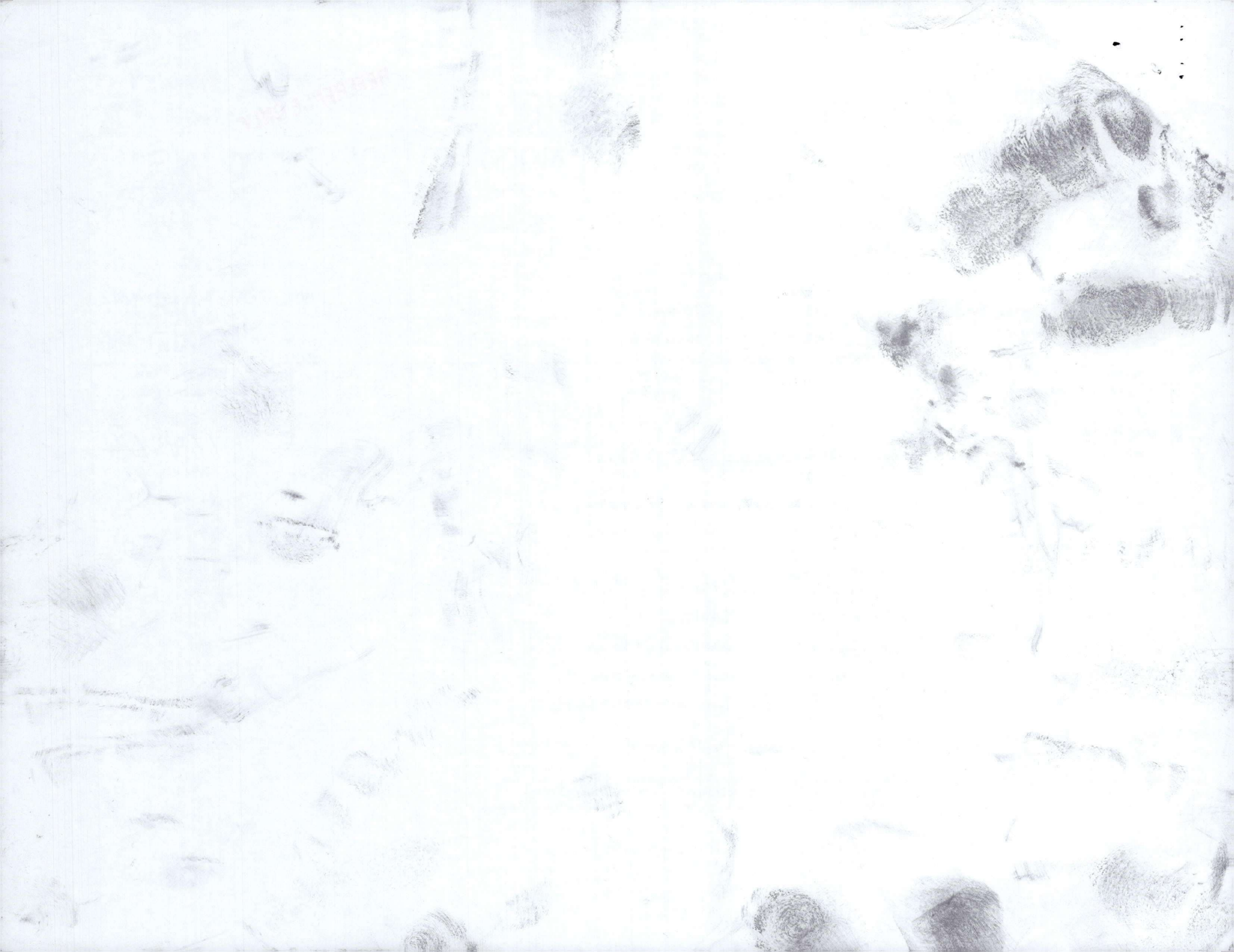
REFERENCE ONLY

Page 2

Item ID: D206-642-151 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Replacement Skidtube, Low Gear with Run-on Landing Fits LH or RH
 Start Date: 7/24/2017 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 7/27/2017 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00				1	0	36	17-07-19
110	Memo	0.90							
Skidtubes	1-Deburr Fwd edge of tube								
Skidtubes	2- Remove ridge on inside of Fwd edge of tube as per Dwg D3804								
	3-Weld Fwd Cap as per Dwg D3804. Use aluminum rod. Grind D2647 to fit as required.								
	Pick:								
	Qty Part Number Description Batch								
	A/R Aluminum Rod M136158/M137133								
	4-Grind weld flush to cap on top surface only.								
	5-Cut Aft end as per dwg D3804 from front of tube and Deburr								
	6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D3804								
	7-Open holes for Aft end cap as per Dwg D3804 with #30 Drill Bit using DT8025.								
	8-Drill pilot holes using Dt8166 & DT8169D & DT9771.								
	9-Locate DT8732A from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732B & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732A & doubler leaving DT8732B for added support.								
	10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.								



Work Order ID 164122***164122***

Page 3

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Item ID: D206-642-151

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube, Low Gear with Run-on Landing Fits LH or RH

Start Date: 7/24/2017 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 7/27/2017 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads.

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D3804

13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder

14-Remove indexing edge using DT8741 as per Dwg D3804. Leave 0.070" wall minimum.

15-C'sink GHW rivet holes as per Dwg D3804

16- Open Aft cap hole #6.
****no wearplate holes for this skidtube****

17- Open x-bolt spacer holes to finished size
DO NOT OPEN HOLES OF DETAIL B, OF DEO D3804-A-1

18- Deburr tube as per QSI 18 and blow out chips from inside the tube

BE170719

Work Order ID 164122

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164122

Page 5

Item ID: D206-642-151 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Replacement Skidtube, Low Gear with Run-on Landing Fits LH or RH
Start Date: 7/24/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/27/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	0.00 0.01				/			DAS 38 9-88 JUL 31 2017
160 *160* Skidtubes Skidtubes	Skidtubes Memo 1-Open holes of detail B to finished size as per Dwg DEO D3804, (without cutting fluid) 2-C'sink one crossbolt spacer hole as per Dwg D3804 DEO Detail B(without cutting fluid) 3-Deburr and blow out all chips from inside the tube	0.00 1.54				/	0		BE 1707-31

Work Order ID 164122

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164122

Page 6

Item ID: D206-642-151 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Replacement Skidtube, Low Gear with Run-on Landing Fits LH or RH
 Start Date: 7/24/2017 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 7/27/2017 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Skidtubes	0.00							
180									
Skidtubes	Memo	0.88							
Skidtubes	1-Locate, install and rivet doublers as per Dwg D3804. Micro-shave rivets as required								
	2-Bond D2654-1 web in place as per QS 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting								
	Start Date: <u>7/07/17</u> Time: <u>1:45</u>								
	Finish Date: _____ Time: _____								
	Pick:								
	Qty Part Number Description Batch								
	A/R Sikaflex-291 <u>m137946</u>								
	Sikaflex expire date: <u>2018-03-29</u>								
190	QC5- Inspect part completeness to step on W/O	0.00							
190									
QC	Memo	0.02							
Quality Control									

DAS
38
9-89
AUG 01 2017

Work Order ID 164122

Thursday, July 13, 2017 12:33:14 PM

164122

Page 7

Item ID: D206-642-151**Accept*****N9000040100*****Setup Start *NS1*****Revision ID:****Stop *NS2*****Item Name:** Replacement Skidtube, Low Gear with Run-on Landing Fits LH or RH**Start Date:** 7/24/2017 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 7/27/2017 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start *NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	Skidtubes	0.00							
200									
Skidtubes									
Skidtubes									
	Memo	0.95							
	1-Remove alodine in one area see DEO Detail B from around hole and prepare for welding								
	2-Prep per QSI 005 and Insert one D2649 crossbolt spacer. Weld as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.								
	Pick:								
	QtyPart NumberDescriptionBatch								
	A/RAluminum Rod <u>M7136158</u>								
	3-Grind welds flush as per Dwg D3804.								
	4- Insert (2) D3286-3 spacers as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.402" before welding other side. Use SS rod as required.								
	A/RSS Rod <u>NONE</u>								
	5- Insert D4720-1 Spacer. Swage to 0.313" X 0.75" DP per QSI 002. Trim and grind flush per QSI 002								

BE170801

1 mGG 17/08/02